AGRICULTURAL INFORMATION LITERACY AMONG THE RURAL COMMUNITY: A CASE STUDY OF KALYAN KARNATAKA REGION

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KARNATAKA STATE AKKAMAHADEVI WOMEN'S UNIVERSITY, VIJAYAPURA

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1. Introduction

India is a land of villages, Out of 1.30 billion populations; 833 million Indians live in rural area. Two- third population of our country depends directly and indirectly on agriculture, it is considered to be the base for country's economic development. Agriculture is major occupation among the rural community and it is known to be one of the most significant economic activities. And it is still demographically extensive economic activity in India, even though its contribution to GDP is gradually declining (Census of India, 2011). It is said to be an Art, Science and Commerce. There is need for the development of rural areas for the meaningful development of developing countries (Alegbeley and Aiana, 1985; Cohen, 1987). Rural development includes the development of agriculture based related activities, village and cottage industries, skills development, social-economic infrastructure, community services and facilities, education, technology and culture (Pandey and *et al.*, 2014).

2. Role of Information in development

Today, information plays a major role in every human activity. Its role in the development process has been a subject of extensive debate. Many researchers have argued that lack of information negatively impact development process (Bell, 1986; Boon, 1986; Surges and Neill, 1998). Development of rural areas can only be effective if rural community has the ability to access relevant and timely information for their professional and day to day activities. Rural community comprises of a group of inhabitants who live a rustic or country lifestyle (Harande, 2009). Hawkins (1987) has confirmed that information is a commodity and is a requirement for economic enhancement and development of rural community.

Some of the areas where information is required for rural community especially farmers are in the management of cultivation of crops, supply of inputs, implementation of modern equipments followed for the cultivation, animal husbandry, utilization of natural resources, watershed management, early warning systems (drought)soil testing information, types of seeds, method of cultivation, climate information, pests and diseases and type of fertilizer to be applied for the crops, co-operative bank system , information about the government welfare schemes, bank loan

system, credit and market prices (Munyua, 2000). In addition, they require information for their routine activities such as banking, healthcare, education for their children and government schemes meant for rural community.Balit and *et al*. (1996) pointed out that knowledge and information are the basic ingredients of making one to be self-reliant and are essential for facilitating rural development. According to the modern citizenship rights, access to information is a basic right of a citizen (Marcella and Baxter, 2000).

Government of India and Government of Karnataka have initiated a number of projects for the development of rural community. Some of the important projects of Government of India and Government of Karnataka are:

1. Soil Health Card Scheme
2. Neem coaled urea (NCU)
3. Paramapragat Krishi Vikas Yojana (PKVY)
4. Pradhan Mantri KrishiVikasYojana (PMKSY)
5. National Agriculture Market (e-NAM)
6. Pradhan Mantri Fasal BimaYojana (PMCBY)
7. Restructured weather based crop Insurance Scheme (RWBCIS)
8. Interest Subvention Scheme (ISS).
9. Bhoomi (Meaning Land) a project of on-line delivery and management of land records in Karnataka;
10. E-Choupal(The e-Choupal model has been specifically designed to tackle the challenges posed by the unique features of Indian Agriculture); and

In India, Village Knowledge Centers have been established with co-operation of National Alliance for Mission 2007, Non- Governmental Organizations, Department of Information Technology, Ministry of Panchayat Raj and National Agriculture Banking and Rural Development (NABARD). Several one stop centers such as Bangalore One, Gulbarga One have been established in major cities to offer several government services fewer than one roof (Bhatnagar, 2000).However, the rural community is not able to utilize these services / projects due to lack of Information Literacy skills.

3. Need for Information Literacy among Rural Community

Zijp (1994) identified factors such as poor educational level, lack of knowledge, lack of innovations, lack of information literacy skills, human involvement, and political and social barriers which are limiting the efficient use of information by rural community.

Information literacy is required at every stage and every steps and sphere of a person's life starting from school education to higher education and from social life to personal life (Ghosh, 2006). Information literacy is defined as the ability of the individuals to recognize when information is needed and have the ability to locate information in many formats, evaluate and effectively use the required information in order to become Life Long learners (ALA, 1989).

Eamin Ali (2012) observed that an information literate individual is able to : determine the extent of information needed; access the needed information effectively and efficiently; evaluate information and its sources critically; incorporate selected information into one's knowledge base; use of information effectively to accomplish a specific purpose, and understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally (Association of College and Research Libraries, 2000).

Jiaoping and *et al.* (2009) stated that Information literacy is one of the necessary skills for an individual to function in a modern economy of the 21st century.

Information Literacy is a broader term which refers to a set of skills such as media literacy, digital literacy, research literacy and publishing literacy. Information literacy is enshrined in the constitution of developed countries like USA, UK and South Africa. In India, National Knowledge Commission has emphasized the need for information literacy skills to every citizen of India.

4. Karnataka State

Karnataka is one of the progressive State in India and the eighth largest State in India by area, and ninth largest State by population. It comprises 31 districts and Kannada is the official and most widely spoken language. The total population of the State is 52,733,958 and the total literacy rate is 67.04% with male literacy of 76.29% and female literacy of 57.45%.

The Karnataka is an agrarian State known worldwide for its production of coffee, raw silk and sandalwood. The State has 75% share of the total floriculture industry of the country. About 70% of the people of the State live in villages and 71%

of the total population is agriculture dependent. The major crops grown in the State are: rice, ragi, jowar, maize, and pulses besides oilseeds and a number of cash crops, Cashew, coconut, areca nut, cardamom, chilies, cotton, sugarcane and tobacco are among the other crops produced in the State (Karnataka State Disaster Management Authority, 2015).

4.1 Kalyan Karnataka Region

Kalyan Karnataka region is located in the north-east of Karnataka, State which includes seven districts, Bidar, Gulbarga, Raichur, Yadgir, Koppal, Bellary and Vijayanagara. The region is considered as the most backward region in the State. The total population of Kalyan Karnataka region is 11,286,343 (hkdrb.kar.nic) of which 75.24%of the population lives in rural areas.Socio-economic indicators such as literacy rate, per capita income are much below the State average and National average (Table-1). The Government of India has introduced article 371J to ensure overall development of the region including education, employment and infrastructure. To take full advantage of the facilities, people of Kalyan-Karnataka region should be competent with technical skills in their area of work and soft skills such as communication skills. Information Literacy plays a major role in developing the required skills and competencies. First step in imparting Information Literacy skills is to assess the status of skills they possess.

5. Profile of Kalyan Karnataka Region

IN 1948 Hyderabad state was officially merged in to India

Kalyan Karnataka is a region of Indian state which was part of kingdom of Hyderabad ruled by the Nizams and the madras presidency of British India. The region comprises Bidar, Kalaburagi, Raichur, Koppal, Yadgiri of Hyderabad state, Ballary and vijayanagara of Madras province that are now present in the Karnataka State. In 2019 the Hyderabad Karnataka region was officially renamed as KALYAN KARNATAKA (Wikipedia 12/6/2023)

5.1 History and Culture of Kalyan Karnataka Region

Bidar

Bidar is well known for its local art craft "Bidriwere" which is type of encrusted, metal were an alloy composing of zinc & copper is the major constituent of 'Bidriwere' artistic designs are inlaid in silver sandalwood carving. Locally less known but globally renowned sandalwood carving at Bakchodi village in the district produces woodworks.

Bidar geographically it resembles the " Crown of the State" Occupying its northern tip, it is bounded by Kamareddy & Sangareddy districts of Telangana State on the eastern side, Latur and Osmanabad districts of Maharashtra State on the northern side & Kalaburagi district on the southern side. The Bidar district constituted by five Talukas is Aurad, Basavakalyan, Bhalki, Bidar and Humanabad with Bidar being the head quarter of the district. It is connected with NH 9 and NH 218. The traditional tales refer to this as "Viduranagara" of Mahabharata times and also as the place where Nala and Damayanti met, historically the district has a glorious past. It was ruled by Mouryas, Satavahanas, Rastrakutas, Chalukyas, Kalachuries, Kakatias, Khaljis, Bhahamanies, Barideshahis, Mugals and Hyderabad Nizams.

Kalaburagi

Kalaburagi was known as Gulbarga in former days which mean stony land in Kannada the District was under the rule of Nijam's of Hyderabad before independence. The district has a rich background of knowledge and culture. The existence of university at Nagai in Chitapur, Vignaneeshwara, Mitakshara, Nrupatungas Kavirajmarg and the religious and social revolution led by Shivsharanas and the Sufi saint Banda Nawaz are all evidence of it.

Yadgiri

Yadgiri popularly called as "Yadavagiri" by the local people, was once a capital of the Yadava Kingdom. Have rich historical and cultural traditions. Yadavas, the earliest Muslim empire of South India chose Yadgiri to be their capital and ruled from here from 1347 to 1425 A.D. Mentioned as Yadgiri in ancient inscriptions, Yadgiri is popularly known as "Yadavagiri" by the locals. Yadgiri district has its deep roots in history. The famous dynasties of the south, the Satavahans, the Chalukyas of Badami, the Rastrkuta, Shahis, Aidilshahis, and Nizamshahis have ruled over the district.

Raichur

Raichur The district derives its name from its headquarters town Raichur (origin of name Rayachooru in Kannada), as do most of the other districts also in the State. Though many of the villagers roundabout still call the place by the earlier from of the name which is Rayachooru, The District of Raichur was a part of the Hyderabad State till the re-organisation of State on 1st November 1956. The recorded history of the district is traced to as far back as the third century B.C. The fact that three minor rock edicts of Ashoka are found in this district one at Maski in the Lingasugur taluk and the other two near Koppal, prove that this area was included in the dominions of the great Mauryan king Ashoka (273 – 236 B.C.). At that time, this region was under the governance of the Viceroy or Mahamatra of Ashoka**.**

Koppal

Koppal the history of Koppal can be traced back to the kingdoms of Shathavahanas, Gangas, Hoysalas and Chalukya Dynasties. The name of the district i.e. "KOPPAL" is found in the poetic work of the great poet Kavirajamarga (During King Nrupathunga's time of 814-878 A.D.) as "VIDITHA MAHA KOPANA NAGARA". During Ashoka's period, the Jainism gained greater momentum in this region. Therefore, it was called "Jainkashi". In twelth century A.D. Veerashaivaism of Social Reformer Basaveshwara became popular. The present Gavi Math of Koppal has great attraction.

Ballary

Ballary there is a legendary theory derived from one of the stories in 'BasavaPurana'. It says that at Kolur, which is in the proximity of the district headquarters, there was a shivabhakta (Devotee) by name 'Ballesha Mallayya' who would have his food only after worshipping the linga. His great desire was to see the vision of Mallesha (Lord Shiva). To fulfill the desire of his devotee, Lord Shiva, it is said, revealed himself in a 'Balla', a grain measure. The place where Mallesha manisfested himself in a 'Balla' was called 'Bellary'. There is an old Shiva temple of Malleshwara in the fort. The same story has later found expression in the songs of Sarpabhushan Shivayogi, a great mystic poet of Karnataka.

Another theory connects the name of Bellary with the Goddess Durgamma, whose temple is in Gandhinagar, Bellary. In poet Janna's Yashadhara Charite, the word Balari

is used to mean a Goddess and the town is said to have derived its name from this word, because Durgamma had manifested herself in this town**.**

Vijayanagar

Vijayanagar It is the home of the former capital of the famous Vijayanagara Empire and its capital Hampi, which is now one of the UNESCO World Heritage Sites. from 1336 onwards. It was founded by Harihara, also known as Hakka, and his brother Bukka Raya. It is named after its capital city (now ruined) of Vijayanagara, in modern Karnataka, India. It lasted from about 1336 to perhaps about 1660, though throughout its last century it was in a slow decline due to a massive and catastrophic defeat at the hands of an alliance of the sultanates, and the capital was taken and brutally razed and looted. In the following two centuries, the Vijayanagar empire dominated all of southern India, and was probably stronger than any other power in the Indian subcontinent. The empire during that period served as a bulwark against invasion from the Turkic Sultanates of the Indo-Gangetic Plain; and remained in constant competition and conflict with the five Deccan Sultanates that established themselves in the Deccan to the north of it. It remained a land power. In about 1510, Goa, which had been under the rule of the Sultan of Bijapur, was captured by the Portuguese, possibly with the approval or connivance of Vijayanagara. Commerce between the Portuguese and Vijayanagara became very important to both sides. The empire is generally considered to have reached its peak during the rule of Krishna Deva Raya. Krishna conquered or subjugated territories on the east of the Deccan that belonged previously to Orissa. Many of the great monuments of the empire date from his time. Among these are the Hazara Rama temple, the Krishna temple and the UgraNarasimha idol, all at Vijayanagara. He was followed by Achyuta Raya in 1530. In 1542, Achyuta was succeeded by Sada Siva Raya. But the real power lay with Rama (of the third dynasty), who seems to have made a point of unnecessarily provoking the Deccan sultanates, so that eventually they allied against him. In 1565, at the Battle of Talikota, the army of Vijayanagara was routed by an alliance of the Deccan sultanates. Rama Raya was killed in the Battle of Tallikot and his head (the real head) annually covered with oil and red pigment has been exhibited to the pious Mahomedans of Ahmadnagar till 1829. With this, the last significant Hindu kingdom in the Deccan came to an end.

5.2 District Wise Population and Literacy Rate

Districts Name	**Population**	**Literacy rate**
Bidar	1703,300	71 %
Kalaburagi	2,566,326	64.85 %
Raichur	1928812	59.56 %
Yadgir	1174271	51 %
Ballary	2452,595	67.43 %
Vijayanagar	1353628	---
Koppal	1389920	68.1 %

Districts Name	**Geographical Area (SqKm)**	**Agriculture land in use (ha)**
Bidar	5448	436.3
Kalaburagi	10954	1425.56
Raichur	8386	565.7
Yadgir	5234	14.02
Ballary	8447	575.8
Vijayanagar	4252	-------
Koppal	7190	464.8

6. **Statement of the Problem**

The present study is entitled "**AGRICULTURAL INFORMITON LITERACY AMONG THE RURAL COMMUNITY: A CASE STUDY OF KALYAN KARNATAK REGION"**

7. Definition of the Concepts

American Library Association defined that "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information"(ALA, 1989).

i) Information Literacy

An Information Literate person is one who is able to understand the need for information, locate, evaluate and use that information in completing the task.

ii) Rural Community

Village or Town is recognized as the basic area of habitation. In all censuses throughout the world, this dichotomy of Rural and Urban areas is recognized and the data are generally presented for the rural and urban areas separately. In the rural areas, the smallest area of habitations the village which generally follows the limits of a revenue village that is recognized by the normal district administration. The revenue village need not necessarily be a single agglomeration of the habitations. But, the revenue village has a definite surveyed boundary and each village is a separate administrative unit with separate village accounts. It may have one or more hamlets. The entire revenue village is one unit. There may be un-surveyed villages within forests where the locally recognized boundaries of each habitation area are followed within the larger unit of the forest range officers' jurisdiction (Census of India, 1971).

The important features of the rural community are : agriculture is the main occupation; their life style; low literacy; isolated houses; living in unsettled lands such as forests; low income; limited / no government services and transportation facilities; lack of educational institutions; libraries, less population etc. (Chauhan, 2014). There are 6, 40,867 villages as per Census of India, 2011.

The definition adopted for an urban area as per Census of India 1971 is:

(a) All places with a Municipality, Corporation or Cantonment or Notified Town Area

(b) All other places which satisfied the following criteria:
   - (i) A minimum population of 5,000.
   - (ii) At least 75% of the male working population is non-agricultural.
   - (iii) A density of population of at least 400 sq. km. (i.e. 1000 per sq. Mile) (censusofindia.gov.in).

Need for the study

The purpose of the study is to investigate the level of competency and skills of information literacy among the farmers of Kalyan Karnataka Region; this research addresses the agricultural information needs and gathering habits among the farmers in Kalyan Karnataka region of Karnataka State.

8. Objectives of the Study

- To identify the demographic and socio economic characteristics of farmers under study.
- To know the various agriculture information needs of farmers.
- To study the seeking behavior and gathering information habits of farmers towards farming.
- To identify select and access requiring information resources by the farmers under study.
- To find out the level of awareness, extent of use and level of satisfaction towards information recourses among the farmers under study.
- To study social problem, economical legal issues associated while access the required information.

9. Formulation of Null Hypotheses

Following Null hypotheses have been formulated and tested in the present study.

1 There is no relation between gender and educational status among Rural Community.

2 There is no relation between geographical area of the Farmers and their Agricultural Information needs.

3 There is no relation between geographical area of Farmers and their information needs for day to day activities.

4 There is no relation between gender of the Farmers and their Agricultural Information needs.

5 There is no relation between gender of the Farmers and their information needs for day to day activities.

6 There is no relation between educational status and use of print sources of information by Farmers.

7 There is no relation between educational status and reading habits of newspaper among rural community.

8 There is no relation between educational status of Farmers and use of human sources of information.

9 There is no relation between educational status and use of community centers by Farmers.

10 There is no relation between age of respondents and frequency of visit to Gram Panchayath Library.

10. Scope and Limitations of the Study

The present study is limited to find out the information needs of Farmers to assess the present status of their information literacy skills before conducting any formal information literacy training.

11. Information Literacy Models for Rural Communities

There are Six Models proposed so far related to Information Literacy which are discussed in detail in chapter-2. Among these models, Big6 Model, SCONUL's Seven Pillars of Information Literacy, Empowering8 Model and SAUCE Model were found to be suitable to assess status of the information literacy skills. However, since none of these models are suitable in the context of rural community, the researcher will be developed his own model for the purpose of study using the general framework of above mentioned models.

11.1 Agricultural Information Literacy Model for farmers

The following steps are involved in assessing the status of information literacy of rural community: The below model serves to assess the current status of Information Literacy skills of rural community.

Step – 1: Identification of the need for information

The rural community needs information to meet their day to day information needs and to complete the tasks, such as applying for bank loan, health services etc. In addition, Farmers need information right from the selection of crop to be grown and up to marketing their agriculture produce. Identifying the exact information they need at a given time is very essential.

Step – 2: Discovering the relevant information sources

Various sources of information that are used to find required information include:

1. Print Sources
    a. Newspapers
    b. Journals/Magazines
    c. Books
    d. Posters
    e. Pamphlets and Agriculture newsletters

2. Electronic Sources
    a. Radio
    b. Television
    c. Mobile phones
    d. Internet
    e. Audio visual programs (CDs/DVDs)
3. Human Sources
    a. Neighbors
    b. Agriculture Officers
    c. Experts
    d. Friends and Relatives
    e. Fellow Farmers
    f. Local Leaders
    g. Government / Private Employees
    h. Lawyers
    i. Experienced Persons
    j. Doctors
4. Institutional sources
    a. Agricultural universities
    b. Extension centers of agriculture departments
    c. Schools /colleges
    d. NGOs
    e. Self Help Groups
    f. Youth Clubs
    g. Associations
    h. Mahila Mandals
    i. Community Centers
    j. Agriculture Produce Markets
    k. Provision Stores
    l. Weekly Markets
    m. Cafeteria / Food Courts
    n. Panchayath Office
    o. Gram Panchayath Library.

Step – 3: Evaluation of collected information

It is essential for an individual to evaluate the information collected for its authenticity, accuracy, currency and reliability before using it. In the present context, the rural community needs to verify the information they collect from various sources based on the above mentioned criteria.

Step – 4: Utilization of the information to complete the task

Once the individual is satisfied with the information based on evaluation, it is to be used for problem solving or completing the task at hand.

Step – 5: Assessment of level of satisfaction

Once the problem is solved or task is completed, it is necessary for the individual to assess whether the problem is solved satisfactorily or it could have been done in a better manner.

11. Research Methodology

Based on the above Information Literacy Model for rural community, extensive review of literature on the information literacy at global level, in India and in Karnataka State, and keeping objectives of the study in view, questionnaires shall be designed for Farmers in rural areas of Kalyan Karnataka District. Selection of the sample, methodology adopted for the collection of data will be done as per the nature of the study. Finally the collected data will be processed with help of excel and SPSS software and testing of hypothesis will be carried according to nature of data and type of variables covered under study.

17. Chaptersiation.

Chapter 1- Introduction: deals with need for the study, definition of important concepts, objectives, hypotheses tested, and scope and limitations of the study, proposed Information Literacy Model for Rural Community and chapterization.

Chapter 2- Concept of Information Literacy: this chapter deals with the meaning and definitions of information literacy, standards and models of information literacy

Chapter 3- Review of Literature: In this chapter, review of the important earlier studies in information literacy with emphasis on the Information literacy among the rural community at international and national level is undertaken.

Chapter 4- Research Methodology: gives a detailed account of the sample selection, methodology adopted for tabulation and analysis of data, and statistical tests will be used in the study.

Chapter 5- Analysis and Interpretation: results of analysis of the data shall be presented, null hypotheses will be tested, and inferences will be drawn based on the outcome of analysis and statistical tests.

Chapter 6- Findings, Suggestions for further research and conclusion will be covered.

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Research Guide

(Dr. Gavisiddappa Aanadhalli)